

Aesthetic Values of the Future Cities

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Abstract: *The aesthetic value of the city is one of the most important elements of its urban identity which distinguishes it from other cities; cities that are made in their growth stages which combine the different ingredients of beauty. Contemporary architects and urban designers search for concepts and aesthetic values for contemporary and future cities, which are characterized by being sustainable cities.*

This research raises the question of what are the designing and planning characteristics that achieve aesthetic values for future cities, and what are the urban and architectural vocabularies that enhance the aesthetic values in the contemporary urban developments. In order to answer this question the research adopted an analytical approach to previous studies in order to extrapolate indicators of aesthetic values for future cities (sustainable cities).

A theoretical framework for a comprehensive vocabulary that describes formats is designed. Formulas are clarified to achieve aesthetic values in the future sustainable cities.

Key words: *aesthetic values, future cities, Sustainable cities, contemporary urban developments*

1. Introduction

The aesthetic value has been one of the important subjects for most philosophers, artists, and architects for centuries. Cities which undergo different stages of growth carry various aesthetic values according to their locations, reasons of growth and the different goals of expansion and development. With the acceleration of cities, excessive growth and urban sprawl, some cities began to lose the basic or acquired aesthetic values, while others directed contemporary and future urban development toward supporting and maintaining them. This research examines the aesthetic values of the future cities and defines achieving and supporting them in designing and planning levels.

To achieve this, the researchers adopted an analytical approach for the previous studies to build a comprehensive theoretical framework for the aesthetic values of the future cities and clarify the formulas for achieving them.

2. The Aesthetic Values

According to Oxford Dictionary, the meaning of the word aesthetics is "knowledge derived from the senses". It is related to perception by the senses¹, and Webster Dictionary describes it as a branch of philosophy dealing with the nature of beauty, art, and taste and with the creation and appreciation of beauty.²

According to Lang(1987) the science of aesthetics is concerned with identifying and understanding the factors that contribute to the perception of an object or a process as a beautiful or, at least, a pleasurable experience, and understanding the nature of human ability to create and to enjoy creating displays that are aesthetically pleasing.³

The need for aesthetic is one of the basic human needs (utilitarian, symbolic, aesthetic), where its job is to satisfy the individual psychological requirements to enjoy the presence. Accordingly, the beauty can be defined as the individual's sensual value to the things, which achieve delight by the interaction of psychological sensory abilities with pleasure and enjoyment. It gives the psychology of self-value its existence.

The aesthetic judgment is concerned with all feelings, senses, and emotions in one moment, and has a relationship with physical actions, so aesthetic judgments are subject to cultural condition in some areas, the judgments on aesthetic value can be linked to economic, political and moral values, and so in terms of relying on feelings, emotions, mental, intellectual, views, the will and desire, in addition to culture, preference, behavior of non-conscious, conscious decision, training, instinct and social logic, or some of the other complex stuff and relying on the theory that is adopted.⁴

Porteous (1996) pointed the importance of distinguishing between the sensuous, formal and symbolic aesthetics, where sensuous aesthetics care and help us be aware of what delicious sensations we receive from the environment like sounds, colors and smells, while formal aesthetics are more interested in tasting forms, rhythms and complexities of the visible world and its serial events...The meaning of symbolic aesthetics is the taste of environment that gives people pleasure. Accordingly all of the sensory and formal aesthetics can be within the material values of aesthetics, when the symbolic beauty is aware of moral values.⁵

Accordingly all of the sensory and formal aesthetics can be within the material values of aesthetics, while the symbolic beauty is aware of moral values.

Abdullah / 2009 defined two concepts of beauty; moral and physical beauty. Furthermore he pointed out that there is a conflict between them ever since the creation of human being on earth, but one value outweighs the other in accordance with the philosophy or needs of the community. He also pointed out that since the start of the Industrial Revolution and the entry of the machine and mass production, physical relations dominated in various aspects of life. In contrast, the weakness of moral and spiritual relationships does not mean the absence of aesthetic and moral values in designs.

Many historical and traditional symbols and signs are considered to be creative meanings that represent originality and experience, which are based on the glory of the past that peoples are proud of. Symbols define affiliation in architecture, industry, printing and interior design.

On the other hand, he identified a set of general design's aesthetic values like technical, physical, utilitarian and communicative as well as new and future value, in order to achieve the goals of aesthetic theory in the design within their broad environment and the requirements of the age on the level of dominated intellectual approaches.⁶

Lang defined three types of aesthetics:⁷

- Formal aesthetics which deals with the appreciation of shapes and structures of environment for their own sake, as he pointed out that the geometric quality of the environment is the important side. Whereas other design properties like shapes, proportions, are the subject matter of formal aesthetic.
- Symbolic aesthetics is concerned with associational meanings of patterns for the environment that give people pleasure is concerned with pleasure generated by the association people have or make with specific configurations and characteristics of the built environment.

The building environment is full of potential symbolic meanings for people. The recognition of these meanings, consciously or subconsciously are related to people's attitude and feelings towards the environment and about themselves. Variables of the building environment that carry meaning are building configuration, spatial configuration, materials, the nature of illumination, the non visual environment, and the meaning of nonmaterial attributes of the built environment.

- Sensory aesthetics is an important component in relating people's response to the environment.

Several writers (such as Rapaport 1977, 1982) believed that, when architects and urban designers' emphasize formal aesthetic, most people appreciate the symbolic meaning of the environment and the activities it affords for them.

3. The Aesthetics of the City

Jackson(1959)referred to three major goals for the design policies of cities (social - economic efficiency, biological and health), and pointed out that cities have to provide their citizens constantly with satisfactory sensory and aesthetic experience. That's why cities were considered according to the proposals of Mumford (1966)The greatest artwork of human beings,⁸ and The building environment can represent a work of art at any dimension of human experience.⁹

According to Blanc (2013) giving the urban setting its full meaning requires aesthetic engagement which involves a visual learning experience from the natural, physical and emotional dimensions as the aesthetic experience is not related only to building environment but it also includes the living environments.¹⁰

Indeed, decision makers and developers today do take aesthetic experience into consideration. But it nonetheless contributes essentially to an aestheticization of the environment that favors a spectacular vision of the city.¹¹

To Rossi/ 1988, architecture is inseparable from life and society. People create the buildings and cities with an intention of creating aesthetic better surrounding to live in, he thinks that Urban aesthetics constitute a science founded from the accumulated meaning inherited from the pre-existing buildings in the city.¹²

3.1. Aesthetic Elements of The City

The idea of aesthetic engagement involves an active experience as the aesthetic experience of environment increases the value of both the environment and the citizens at the same time.¹³

According to Al-Jaf (2012) the aesthetics of the cities lie in civil values, sharing of knowledge, cultural diversity and provide many means of transportation. In addition to providing means of cleaning the streets and removing waste of the geographical landscape, public spaces and facilities, rest areas and diverse music through local radio or itinerant music, it strengthens the law which prevents noise and pollution.¹⁴

The main vocabulary that increases the aesthetic value of the urban context is the diversity of natural vocabulary (natural components) such as color, shape, density and structure of horizontal and vertical.¹⁵

Atfeh (2008) and Alam(1998) noticed the importance of urban organization and coordination between spatial and temporal organization on one hand, and the elements of urban configuration that meets the citizens and residents' needs on the other hand. These elements can be horizontal like roads and infrastructures or vertical elements of buildings lighting and trees and so on. The contemporary trends in planning and organizing call for the great attention to these aesthetic elements because of their inherent advantages and aesthetic quality and serving life in cities and residential communities.¹⁶

Atfeh identified the basic aesthetic elements of the city as:¹⁷

- roads and alleys.
- landscaping as an essential element in the physical configuration
- elements of public lighting
- Urban furniture, functional furniture, aesthetic furniture
- Water in the city

Architecture and Urbanism play the most important role in the imagining of the sizes of the building, and the way they relate to and presence in a space, and then the implementation, as one cannot talk about art found in any form unless the architect pinpoints in his studies the following points:

- The proposed elevations and their compatibility with the existing buildings to avoid repetition, boredom and monotony.
- Road junctions and the buildings vista that form them.
- The proposed Perspective for the urban form and its impacts on the public spaces surrounding it.
- The proposed public spaces by designers as aesthetic elements.

When **Mahmud & Mohammed** / 2015, point out that historical and heritage value of the city can be improved by the investment of cultural elements like historical buildings.¹⁸

3.2. City Relations Aesthetically

Many studies and literatures confirm that experiences lived in cities through moving, and note the importance of the travels, the experience of moving, dynamic vision and the sequential rhythm or serial vision .

Since the establishment of the urban landscape is the art of the relationship, and the most important approach in the aesthetic design of the cities is the art of forming. Cities designers are dealt with aesthetics as visual forming similar to the works of art and considered the essence of success in this is a sense of unity associated with clarity.¹⁹

According to Cullen (1961), the buildings that are seen collectively give visual pleasure which cannot be given by each building separately. The building, which stands alone called architecture, but a set of buildings together is an art of forming. The cityscape cannot be evaluated technically, but as an art of relationships that need to be aesthetic and visual sensor.²⁰

Cullen identified three basic ways to achieve distinctive urban scape a scene:²¹

- The serial vision of the urban landscape elements as a whole.
- The sense of place that determines the sense of the individual (sense of place) in the environment.
- The urban content of the scene like color, texture, scale, style, character and uniqueness, as the aesthetic value of urban space determined by the properties of visual sources.

Visual permeability in urban context generally is based on each of:²²

- Topographical components which are linked to the aesthetic values of natural components which reflects the richness of the urban environment in vocabulary, and natural values of high aesthetic properties and values.
- space organization which represents the morphology of the space structure ,formal and structural properties, that confirms the connectivity and eases of perception for these vocabularies or their visual impact.

The previous studies pointed out that many and varied aspects related to aesthetics of the city which can be summarized as major and minor paragraphs (see Table 1).

4. Aesthetic of Sustainable Cities (Future Cities)

The ideal future city is one of the main goals of the planners and thinkers of all times, for several centuries. The idea of utopia dominated at the thought of the ancient philosophers and thinkers to look toward the well-being in the future cities was renewed from time to time with the different changes and developments.

Rapid urbanization of today brings tremendous pressure on peaceful environment, which generates continuous negative impacts on the future growth. It is meant by the growth and expansion of cities is to rely on the private transportation (cars) that cause social isolation, on the other hand, the importance of finding new perceptions of the future cities (eco-friendly) emerge through the sustainable development in urban planning and designs, as urban development refers to the "non-destruction of the urban environment as well as its ability to sustain its social and economic value with the development of the built environment, including the aesthetic value which is important in the development of healthy social life".²³

The European Union defined the cities of the future as places for social progress, they are platforms for democracy, cultural dialogue, diversity, they are also cities for green spaces, ecological or environmental renewal, and places of attraction, and they are engines of economic growth.²⁴

The sustainable city of the future is an attractive, diverse and cohesive city where its green and healthy city through a comprehensive approach to environmental issues and energy efficiency, as ecosystems are intertwined with social, economic, urban cultural and political systems in a unique way. To become the whole urban areas extensive networks of blue and green, zones and corridors; where the green areas creeps over millions of square meters of surface climb the walls.

The principle of sustainability is based on the importance of cultural heritage that is preserved for future generations. It provides custodial role of the cultural legacy of the great challenges of the cities of the future. The acceptance of society and dealing with the legacy of civilization takes part in building the image and aesthetic vocabulary of the future cities, as the cultural heritage reflects the multiple vocabularies and functions started from the historic center or the traditional urban and main urban streets in the city down to the rural parts and their natural characteristics. This is considered one of the most important vocabularies in the aesthetic evaluation of cities.²⁵

Contemporary trends confirm the importance of the place identity and the role of the environment in the promotion of individual and group identity. Thus the aesthetic preferences focus on the environment which

improves the occupants' cultural identity or a distinctive identity for its visitors . Hence, places with distinctive identity reduce the negative impact of the urban environment, and increase its positive characteristics and urban values. ²⁶

Thus, future sustainable cities show two models, the first, is cities that grow and develop according to the principles of sustainability; the second, is the new cities whose principles of sustainability adopted in their design, and this research will focus on the second model in applied studies

TABLE I: The aesthetics (main vocabularies, sub-paragraphs and variables)

main vocabulary	sub-paragraphs and variables		
Aesthetic values of the city	Physical values		formal values / visual Sensory values
	symbolic values		Connectivity value Historical and heritage value The new value The Future Value
Levels of achieving aesthetic city	elements of aesthetic city	Structural elements of the urban escape	Surfaces (horizontal and vertical) Building blocks Plazas and rest areas
		Natural elements	Geographical landscape Designed green areas landscape water other
		Sensory elements	voice music noise reduction texture smooth smell Different scents Perfume
		elements of street furniture	Technical elements Lighting columns and structures Traffic lights Phone cabins Other
			Functional elements Plates significance Bus stations Trash cans Other
			others Sculptures Toys children Other
		Service elements	Transportation Cleaning and the removal of wastes Infrastructure Other
		Cultural elements	Historical and heritage elements Civil Popularity Cultural and cognitive diversity Other
		the relations of aesthetic city	Visual scene Serial vision Sense of place Uniqueness
			The organization of Urban space Connectivity Legibility Other

5. The Case Study

Two Arab cities were selected for the case study to clarify ways of achieving aesthetic values in future cities. The design of these cities is different in natural and cultural vocabularies.

5.1. The Xeritown- Dubai/ 2008.²⁷/SMAQ– architecture urbanism research and X-Architects²⁸

The project strategy of the urban development relies on mixed-use on the outskirts of the city of Dubai, reflects the planning principles of the Arab settlements, focusing on shaded streets, courtyards and transparent walls, through distinctive technology and natural treatments. The natural treatments include taking into account the natural factors in the planning concept, when technically achieved through the solar cells to provide the needed energy and to provide shading for spaces in the morning.

The project will be analyzed according to the vocabulary of city aesthetics which described previously as follows:

Aesthetic values confirm the physical-visual values, as well as historical, traditional, new and future values. These values are achieved through technology of solar cell and trying to merge between it and the aesthetics of local heritage and the embodiment of functional values. (Fig.1) (Fig. 2)

Levels of achieving aesthetic city: the aesthetic values of the city achieved at the level of the aesthetic elements and the level of relations, as it highlights the natural elements of the desert environment of the city of Dubai and the Concern with the designed nature in green areas and water bodies .It also highlights the structural elements of the urban scene like elevations that carry a distinctive cultural heritage values,

The project also has much distinctive contemporary street furniture; the project emphasizes the social aspects by achieving a clean urban environment by reducing dependence on the cars and using clean energy. The project is based as an integrated system of pedestrian supported by diverse social events (Figs.3)(Fig.4).The design achieves multiple dimensions in an urban harmonious, cohesive and diverse city as there are many factors affecting the aesthetic judgment like the implantation of the location factors, the importance the requirements and the determinants factors of the contemporary technology.

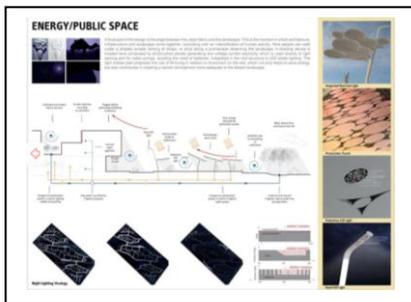


Figure 1: Investment artistic values in the project to save energy and achieve the aesthetic and



Figure 2: The integration of national heritage and values in achieving a

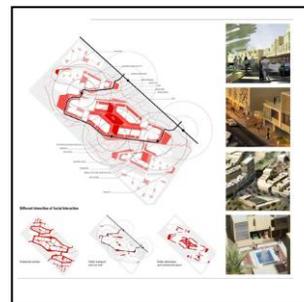


Figure 3: The integration of national heritage and values in achieving a harmonious, diverse and cohesive urban scene

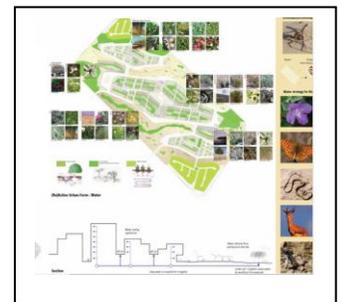


Figure 4: Achieving natural-dimensional and investment in the

5.2. Ghadeer City / Abu Dhabi 2012 -2007/ SUNJIN Engineer and Architecture²⁹

Ghadeer residential project is a 3 million square meters of real estate development on the eastern border of Abu Dhabi, on the border between the cities of Dubai and Abu Dhabi ,the project depends on the concept of creating a self-sufficient sustainable society, confirming on the integration of open spaces with pedestrian axes to support social interaction.

The Project reflects the planning values of the Arab settlements, focusing on historical and heritage vocabulary in the creation of aesthetic vocabulary of urban facades and landscape. With the possibility of taking in the diversity and contemporary to be the key words in the design is sustainability, heritage, and place.

The project will be analyzed according to the vocabulary of the aesthetics as follows:

Aesthetic values: the physical-visual values are dominated in the design, as well as historical and traditional values both new and future values.

Through the project planning, historical and contemporary values are combined with richness in the architectural and planning details down to the landscape (materials and details) (see Figs. 6 and 7).

Levels of achieving aesthetic city: the aesthetic city achieved in the design at the level of elements and relations, as it highlights the natural elements of palm trees and embodied in the green belts that define pedestrian axes, In addition to the bodies of water that reduce the hardness of the desert weather, the design also focuses on elevation elements of that embody the cultural and historic values of the area of designing elements and relationships to create shaded elevations, which is one of the characteristics of architecture in the Gulf (see figure 7).

The project also enhances the external spaces by the use of a variety of elements that supports the place function and contributes to the creation of socially rich environment through an integrated shaded pedestrian system by colonnade or added structures. The design achieves multiple dimensions as an urban design emphasizes the diversity of events along the pedestrian axes that enhance the natural green elements. The impact of cultural values is shown clearly in the design, in addition to the elements of the landscape. The diversity in the shade and shadows creates different architectural details, supported by principles of sustainability and technology of renewable energy to create a rich visual environment in details.



Fig. 5 :the vocabulary of heritage

Fig. 6: Project Planning

Fig. 7: achieving foreign elements and spaces invested.

6. Conclusions

Conclusions can be summarized as follows:

Natural and temporal factors in addition to the personal and cultural identity affect the cities' aesthetic preference, and achieving them in the cities of the future. The research defined the future cities are those that follow a sustainable approach in their creation or development.

The achievement of aesthetic values in the cities varies according to the confirmation of aesthetic values or levels of achievements.

The technical and natural aesthetic vocabularies are considered most important components of the urban scene of the future cities and that the integration between them lead to achieve a distinguished urban escape, where the form of directing the pedestrian toward the node of aesthetic values, physical and natural, is one of the most important characteristics of designing classical cities, which was re-invested in the design of the movement system in the cities of the future.

The case study showed the attitude of Arab urban projects to achieve heritage and historical aspects in the aesthetics of sustainable city, and to achieve distinct contemporary local identity, whereas the international urban literature confirmed the evolving of each natural or contemporary technology to achieve the aspects of aesthetics of a sustainable city.

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